NATIONAL AGENCY FOR ENERGY REGULATION OF MOLDOVA

Transmission Network Codes, Market Development, Trade and Access to Networks

Chisinau, May 5-6, 2010

TECHNICAL NORMS FOR TRANSMISSION NETWORKS

Legal basis

- **✓** Law on Electricity
- **✓** Law on Natural Gas

Secondary legislation

- ✓ TECHNICAL NORMS FOR TRANSMISSION NETWORKS
- ✓ TECHNICAL NORMS FOR NATURAL GAS TRANSMISSION NETWORKS

Law on Electricity

Technical norms for electricity transmission networks

- 1. Elaborated and approved by the National Energy Regulatory Agency
- 2. The main goals of the Technical norms for electricity transmission networks are:
 - a) determination of the set of rules for ensuring system users' access to power transmission networks;
 - b) determination of the set of rules for dispatch control over power transmission networks;
 - c) determination of liability and responsibilities of the transmission system operator and system users;
 - d) specification of technical quality parameters of functioning of transmission networks;
 - e) determination of procedures of dispatch control over generating units in accordance with the Electricity Market Rules;
 - f) determination of technical requirements and procedures for connection to power transmission networks;

- g) Determination of technical requirements for dispatched units in the course of connection to power transmission networks;
- h) determination of principles of power transmission network development;
- i) ensuring interoperability of power grids on the basis of objective and non-discriminatory criteria;
- j) setting interfaces and information flows between the transmission network operator and system users.
- (3) exchange of information between the transmission network operator and system users is done in accordance with the data collection procedure and their exchange between electricity market participants, provided other valid norms are observed.

Transmission Network and System Operator

- a) carries out unified operational-technological control over the power system;
- b) operates, maintains, upgrades, restores, expands transmission networks, including interconnection tie lines, in the conditions of economic efficiency and provides services on transmission of electricity in accordance with terms of concluded agreements and provisions of laws and normative acts. In the course of operation, maintenance, upgrading, restoration and expansion of the power transmission network, the power transmission network and system operator has to apply modern managerial methods for energy efficiency/demand efficiency, meanwhile observing minimal standards for services and for expansion of power transmission networks, in particular, interconnection lines;
- c) ensures long-term ability of power transmission networks to satisfy reasonable demand for services related to transmission of electricity, elaborates and implements perspective plans on expansion and development of power transmission networks taking into account forecasted consumption of electricity;
- d) contributes to ensuring safety of power supply through adequate transmission networks and to ensuring reliability of functioning of transmission networks;

- e) manages electricity flows in in power transmission networks taking into account exchanges with other interconnected systems. For this purpose the transmission network and system operator is responsible for safe, reliable and efficient provision of services related to transmission, and in connection with that for ensuring availability of all system services to a degree that it does not depend on any other transmission network, with which his network is interconnected;
- f) performs functions of a congestion manager in power transmission networks in accordance with the Electricity Market Rules and Technical norms for power transmission networks;
- g) responds to any requests concerning provision of services, including a request to issue a permit for connection within 15-day period from the day the request was registered;
- h) carries out connection, re-connection to power transmission networks, disconnection from them, or their maintenance in accordance with terms and conditions set in the Regulation on supply and use of electricity and in Technical norms for power transmission networks;
- i) to prevent discrimination among system users or categories of system users, in particular in favor of affiliated enterprises.

- j) to provide to the operator of any other power network interconnected with his network sufficient information to ensure efficient and safe operation of power networks and also coordinated development and interoperability of interconnected power networks. The operator of transmission network and system provides information to power system operators of neighboring countries to ensure efficient and safe operation of interconnected grids;
- k) to provide sufficient information necessary to system users for efficient access to power transmission networks;
- I) on a daily basis to place on his web-page information of operational-technical nature about functioning of the power grid;
- m) to provide within specified timeframe for approval of the Agency and investment plan for the next five years subject to annual adjustment. The investment plan is published on the web-page of the transmission network and system operator;

CONDITIONS FOR CONNECTION TO POWER TRANSMISSION NETWORK

 The power transmission network and system, SE "Moldelectrica", has to ensure regulated access to power transmission network.

Stages of the process of connection to power transmission network:

- a) issuance of a permit for connection. Connection permits are issues by the power transmission network and system operator are issued within 15 calendar days from the date of submission of the connection application. The power transmission network and system operator has to cooperate with the applicant in selection and implementation of the most profitable option of connection to transmission network;
- b) execution of work necessary for connection. An applicant can request the operator of the transmission network and system to carry out works related to installation of the feeding installation on the basis of the concluded relevant agreement after paying costs of such services;
- c) dry runs of installations of users for the purpose of preparing them for commissioning;
- d) signing documents on separation of installations;
- e) conclusion of a contract;
- f) commissioning of connection installations;
- g) supply of voltage to power installation of a user.

- Upon request of any applicant (generator of electricity, distributor, supplier, end users) with respect to execution of new connection or change of some existing connection to power transmission network the following is done:
- a) studies the connection application and attached technical documents;
- b) issues connection permits;
- c) offers a connection agreement, which contain, at least, the following:
 - works that have to be executed to ensure connection to power transmission network;
 - works that have to be executed for expansion or strengthening of power transmission network dictated by implementation or change of a relevant connection;
 - options of staggering works on connection;
 - services provided by the SE "Moldelectrica" in the process of operation of the feeding installation;
 - connection fee.
- An agreement for execution of work on direct connection and/or works on strengthening or development of power transmission network up to the separation point should contain specific conditions related to access and performance of work.

OPERATION OF POWER TRANSMISSION NETWORK

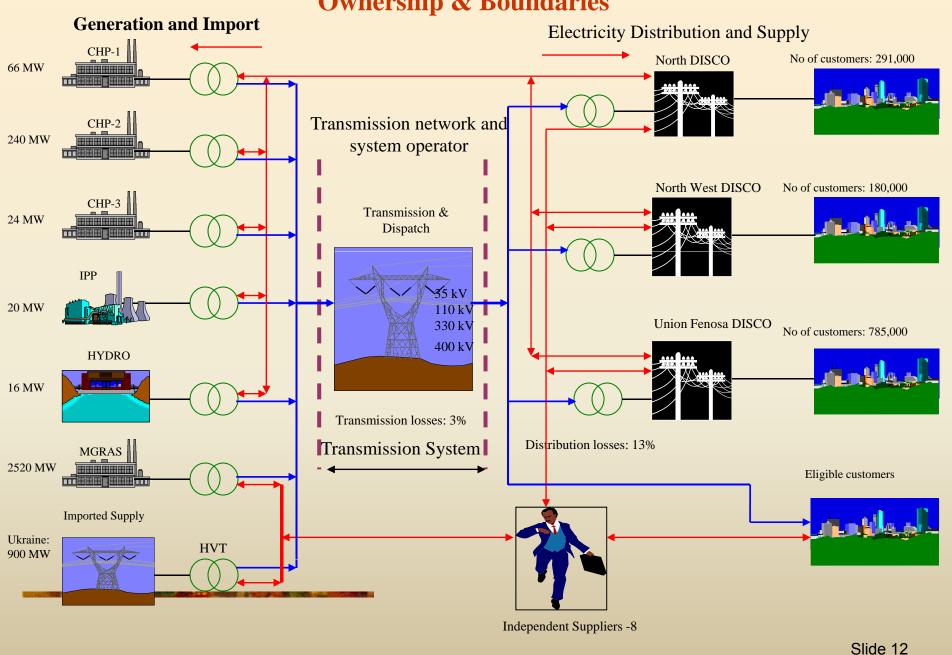
- Operates, maintains, upgrades, restores, expands transmission networks, including interconnection tie lines, in the conditions of economic efficiency and provides services on transmission of electricity in accordance with terms of concluded agreements and provisions of laws and normative acts. In the course of operation, maintenance, upgrading, restoration and expansion of the power transmission network, the power transmission network and system operator has to apply modern managerial methods for energy efficiency/demand efficiency, meanwhile observing minimal standards for services and for expansion of power transmission networks, in particular, interconnection lines.
- Implementation of the Second energy project funded by the World Bank plays a significant role in upgrade of the power grid. Under the project the following was done:
 - the electricity metering system was improved;
 - proper equipment was installed for improvement of work of the central dispatch office;
 - modernization of equipment of high voltage transmission lines and substations.

Market Development, Trade and Access

 Legal relations between generators, operator of the transmission network and system, distribution system operators, suppliers of electricity and eligible consumers are set on the basis of agreements concluded in accordance with the present law, Electricity Market Rules developed and approved by the Agency, in accordance with other normative acts.

Moldova Power Market

Ownership & Boundaries



ELECTRICITY MARKET OPENING

- (1) Electricity market opening is done in phases determined by the Agency after coordination with the Government, the timeframes are the following:
- a) for non-residential consumers by January 1, 2013;
- b) for residential consumers by January 1, 2015.
- (2) Up to January 1, 2013 :
- a) distribution network operators can at the same time be suppliers of electricity at regulated tariffs;
- b) each distribution network operator has to unbundle legally and functionally distribution activities from electricity supply activities at regulated tariffs by means of reorganization creating two enterprises – for distribution and supply. Newly established enterprises are legal successors of licenses for electricity distribution and supply, correspondingly, at regulated tariffs, which [licenses] were held by the vertically integrated enterprise at the time the current law came into effect.

NATURAL GAS MARKET

- Natural gas transmission network operator -1
- Natural gas distribution network operators 26
- Suppliers of natural gas at regulated tariffs 27
- Suppliers of natural gas at non-regulated tariffs 1
- The end user can conclude an agreement on supply of natural gas with any supplier, including a foreign one. When switching, the end user cannot be forced to make any payments. Conditions and methods of end user switching from one supplier to another are set in the regulation developed and approved by the Agency.

NATURAL GAS MARKET

1. By January 1, 2013:

- a) distribution network operators serving more than 100,000 end users can at the same time be suppliers of natural gas at regulated tariffs;
- b) each distribution network operator serving more than 100000 end users has to unbundle legally and functionally natural gas distribution activities from natural gas supply at regulated tariffs through reorganization, creating two enterprises for distribution and supply. Newly established enterprises are legal successors of licenses for natural gas distribution and supply, correspondingly, at regulated tariffs, which [licenses] were held by the vertically integrated enterprise at the time the current law came into effect.

Access to natural gas transmission network

- Third party access to natural gas transmission network is done at published tariffs applied to all system users based on the principles of objectivity and nondiscrimination.
- 2. The transmission network operator provides access to natural gas transmission and distribution networks to all system users and third persons without any discrimination. Transmission network operator can refuse to grant access to its network in case there is no free transfer capacity of the natural gas transmission network. Refusal has to be motivated and substantiated properly. The transmission network operator has to provide relevant information about necessary measures related to expansion of natural gas transmission network and about specific terms of implementing expansion of natural gas transmission network.
- 3. Third party access to natural gas transmission network is done on the conditions and within terms set by the Natural Gas Market Rules, Regulation on supply and use of natural gas and also in accordance with Technical norms for natural gas transmission network.
- 4. The transmission network operator has to inform the Agency about any cases of refusal to natural gas market participants or an applicant to grant access to natural gas transmission network, and also about the cases of congestions with a suggestion how to resolve them.
- 5. The transmission network operator is responsible for connection to the natural gas transmission network of installations of other license holders or installations of consumers upon request of applicants or consumers.

Supplier of Last Resort

- The Agency identifies a supplier of electricity or natural gas at regulated tariffs as a supplier of last resort in the territory where the supplier carries out its activities.
- A supplier of last resort concludes agreements on supply of electricity or natural gas with any end user in accordance with the present law, regulations and tariffs approved by the National Energy Regulatory Agency. Terms and conditions that have to be observed in the course of concluding agreements on supply of electricity at regulated tariffs are set in the Regulation on supply and use of electricity or Regulation on supply and use of natural gas developed and approved by the Agency.

THANK YOU!